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Supreme Court refuses CEI recovery plea

WASHINGTON, D.C.—The U.S. Supreme Court has refused to consider an appeal by Cleveland Electric Illuminating Company regarding the utility's effort to recover the costs of its abandoned nuclear units.

Last July, in a ruling that reversed the Ohio Public Utilities Commission, the state supreme court ruled that CEI should not be permitted to recover from ratepayers the $56.4 million it had sunk into construction of units 2 and 3 of the Davis-Besse station and units 1 and 2 of the Erie nuclear facility(see *EL&P*, September 1981, page 1).

After proper appeals at the state level, CEI took its case to the U.S. Supreme Court. On January 25, 1982, the High Court said the company's appeal was dismissed "for want of a properly presented federal question."

According to attorney Gretchen J. Hummel of the Ohio Consumers' Counsel, provisions of the U.S. Supreme Court specify that in order for this court to have jurisdiction, federal questions must not only have been raised before the highest court in the state, but the state court must "expressly" rule on these. "The first time the company argued federal questions was in its motion for rehearing before the Ohio Supreme Court,"

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FERC's 'avoided cost,' interconnection rules overturned by Appeals Court

WASHINGTON, D.C.—The U.S. Court of Appeals in late January struck down two major rules promulgated by the Federal Energy Regulatory Commission under the Public Utility Regulatory Policies Act relating to how electric companies interact with cogenerators and small power producers.

Deciding a case brought to the District of Columbia Circuit by the American Electric Power Service Corporation, the judges vacated FERC rules requiring utilities to use full "avoided costs" in calculating how much they will pay for power supplied by cogenerators and small power producers. The court also vacated the regulatory agency's so-called interconnection rule, which was seen as giving "blanket authority" to cogenerators to interconnect with electric utilities without having to meet the requirements of certain sections of the Federal Power Act.

Cogeneration progress curtailed

The decision by the Appeals Court is likely to stall further progress in bringing forward important alternative energy production sources in the U.S. "It is important that this matter be resolved as promptly as possible, since it is likely to constitute a significant drag on the further development of cogeneration and small power production," Dr. William W. Lindsay, director of FERC's Office of Electric Power Regulation said at a recent meeting on rates in Kansas City, Missouri.

And according to Edison Electric Institute's David Owens, who also spoke at the Eighth Annual Symposium on Problems of Regulated Industries, the appeals court decision has already been stayed to give FERC an opportunity to seek a re-

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Although the sun may be shining on unit 1 of the Washington Public Power Supple System's nuclear construction project, gloom has engulfed participants in units 4 and 5, as recent developments have necessitated cancellation. Even while 4 & 5 participants may be positioning themselves for legal battles over who should pay for the abandoned plants, investor demand for bonds offered in early February for units 1, 2, and 3 was so strong that the supply system upped the issue from $500 to $850 million. Above, ironworkers place the last layers of steel reinforcing bar in the latticework covering the 190-foot dome of WNP-1. Completion is targeted for April.

Perkins, Black Fox nuclear units are terminated

BARRINGTON, IL — Five more nuclear units have been scrapped. Duke Power Company has announced cancellation of its proposed 3-unit Perkins station, and Public Service Company of Oklahoma has decided that it will no longer build units 1 and 2 of that company's proposed Black Fox station.

Both utilities cited growing financial pressures attendent to constructing the plants. In a public statement, Martin E. Fate, president and chief executive officer of PSCO, said that extensive delays involved in building nuclear plants had lowered nuclear's cost advantage over coal "to the vanishing point."

Cancellation of the Perkins and Black Fox units raises precipitously the number of nuclear plants that have been terminated in recent months. Carolina Power & Light Co. cancelled two proposed Shearon Harris units earlier this year and Public Service Electric and Gas Company similarly announced abandonment of its proposed Hope Creek-2 unit(see *EL&P*, February, 1982, page 1). Late last year the Pilgrim-2, Bailly, and Callaway nuclear units were also scrapped.

In addition to regulatory uncertainties and financial challenges associated with constructing the three Perkins nuclear units, Duke Power notes that estimated peak demand has fallen significantly since the plants were first planned. Reduced demand on the system has even caused the utility to interrupt construction on unit 2 of its Cherokee nuclear station in Cherokee County, South Carolina. The 3-unit Cherokee station has been the pacing facility, a Duke spokesman said, but even here unit 3 was deferred indefinitely in 1980 and in February, 1981 the utility interrupted construction on unit 2.

When originally planned in 1974, the Perkins station was estimated to cost $1.4 billion for three units. Although precise calculations have not lately been made, comparative estimates with the Cherokee units suggest that had construction continued, the Perkins plant would have cost in excess of $10 billion.

Black Fox uneconomical

According to statements by PSCO, constructing the Black Fox nuclear units was no longer economically attractive. The Oklahoma Corporation Commission apparently thought so too because as part of a recent rate order, the agency offered guidelines

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WPPSS cancels units 4 & 5; participants may challenge

RICHLAND, WASH.—Unable to secure sufficient financing from the 88 electric cooperatives, municipalities, and public utility districts that are participants in the Washington Public Power Supply System nuclear plants 4 and 5, the WPPSS board of directors determined that it would not be possible to "mothball" the units, and so in late January voted to terminate the two projects.

Cancellation of the two nuclear plants, which had run into trouble because of system mismanagement and a statewide referendum requiring voter approval for bond issues after July 1, 1982 (see *EL&P*, December, 1981, page 1), is surely to result in an economic ripple effect, hitting particularly hard some of the smaller cooperatives and municipalities and possibly extending to the regional economy as well.

The supply system has "take or pay" contracts with the 88 participants in WPPSS nuclear projects 4 and 5, which means that even if construction of the units is never completed, as it now will not be, the participants are obligated to pay their share of the projects' costs, including the debt service on the bonds.

To date, the supply system has issued $2.25 billion in revenue bonds for construction of units 4 and 5, but according to participants' spokesman Ray Foleen, carrying this amount for 30 years means that ratepayers will eventually pay nearly $7 billion without receiving any electricity in return.

When the take-or-pay contracts between the supply system and the 88 participants were drawn up some years ago, the Bonneville Power Administration was seen running out of needed energy in the future, and contracting with WPPSS to secure power from nuclear plants 4 and 5 ap-

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In-house dividend reinvestment generates capital

AKRON, OH — A stock dividend reinvestment program administered directly by Ohio Edison's own stock transfer/shareholder recordkeeping departments, rather than by a bank, is expected to produce over $30 million annually for the utility. It produces added savings by eliminating fees normally paid to a bank for reinvestment programs and by increasing shareholder participation.

"We expect to generate in excess of $30 million annually through dividend reinvestment," said Charles Glasgow, assistant secretary. "In September 1980 alone, we collected more than $5 million, and stockholders are investing about $1.5 million a month in optional cash payments through dividend reinvestment. I think we have perhaps the best plan in the country, and I also think we have the best computer-based system to operate it."

Glasgow said that Ohio Edison originally instituted the plan in the interest of stockholder relations and to remain competitive with the industry. It has now become a source of $30 million annually in capitalization needed for corporate growth.

At the time Ohio Edison took the dividend reinvestment program from a New York bank in 1976, the company had about 5,700 participants in dividend reinvestment and was producing about $2-3 million in annual revenues. After the conversion, there was a steady yearly increase of participation. Currently, there are 32,000 participants representing 16 percent of the stockholders.

Ohio Edison uses the Informatics Inc. Corporate Shareholder System, a shareholder accounting system. The utility can service shareholders who reinvest dividends and make additional cash participation purchases through maintenance of the recordkeeping function itself rather than have the agent reinvest the shares for it. Glasgow pointed out that since the in-house system is so flexible, there have been several changes made in the structure of the dividend reinvestment plan.

Participation in the plan doubled in 1978 when it was modified to offer a 5 percent discount on reinvestment dividends. In 1979 it was altered to offer a 3 percent discount for cash and a partial dividend reinvestment program was added in 1980.

"Of course we offer payroll deductions for employees." said Glasgow. "At the same time, we have changed or modified our limits to $20,000 annually, as opposed to the standard $5,000 per quarter with a minimum of $10 per payment."

"It happens to be a very convenient method for our stockholders to increase their ownership in the company by participating in the plan," he added. "They avoid any brokerage commissions or service fees, and they also enjoy the benefit of purchasing additional shares at a discount from market value."

Met Ed bank credit extended

PARSIPPANY, N.J. — The revolving credit agreement banks that have been keeping General Public Utilities on life-support since the Three Mile Island accident have decided that the holding company's present financial status is sufficiently sound to justify continued credit, thus enabling the utility to ease itself past a possible corporate default when its tax payment becomes due in April.

Last year about this time, GPU's Metropolitan Edison Company was being pulled inexorably toward the brink of insolvency as tax time approached and the company found its coffers virtually depleted. What has worked to squash a replay of this threat is the decision in January by the Pennsylvania Public Utility Commission approving a negotiated rate settlement for Met Ed and Pennsylvania Electric Company (see *EL&P*, February, 1982, page 1). A complex, multi-tiered rate increase accord, the settlement has apparently given GPU a more acceptable financial profile, allowing the consortium of 45 banks participating in the company's revolving credit agreement to continue credit to Met Ed at the present limit.

The GPU revolving credit agreement, renewed last October, required a vote of the banks by January 15, 1982, to determine whether or not they would continue support of Met Ed through 1982. Under terms of that agreement, Met Ed has a maximum borrowing limit of $43 million, of which $21 million is currently outstanding.

Met Ed's bank credit limit declines monthly, based on a liquid assets formula established by the banks. It will decline on an accelerated basis beginning in April until it reaches zero at the end of the year.

"We are pleased that the banks have viewed the recent Met Ed rate case settlement as satisfactory and have determined to provide continued support of the company," said William G. Kuhns, GPU chairman and chief executive officer.

"Today's decision by the banks," Kuhns added, "recognizes Met Ed's ability to maintain its borrowings under the limits established by the banks and the company's ability to finance its cumulative monthly bank credit reduction schedule. Most importantly, it avoids a possible default situation in April when the state gross receipts taxes must be paid."

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Energy spending cut in budget

WASHINGTON, D.C. — Dismantling the Energy Department, eliminating most energy research funds and drastically reducing the government's role in energy matters are all part of President Reagan's proposed budget.

President Reagan hopes to reorganize the department by dismissing close to 4,000 of the department's 18,000 jobs and cut back those department programs that survive the reorganization. He hopes that by reducing current spending levels for civilian energy research and conservation programs, he will be able to knock off $2.2 billion from the budget.

If Congress approves, expenditures for energy would be limited to a variety of nuclear programs, filling the nation's Strategic Petroleum Reserve and providing grants for high-risk technologies.

Nearly $1 billion would be sliced from fossil, solar, geothermal and other non-nuclear research. Conservation, electric energy and storage research programs would also be wiped out.

However, no substantial cutbacks are in store for the controversial Clinch River breeder reactor. The budget includes modest funds for cleaning up Three Mile Island.

Even though the White House expects Congress to impose a fee on utilities to pay the majority of the cost to set up nuclear waste disposal sites, the budget calls for more than $230 million to live up to the "clear federal responsibility" to conduct research on proper disposal of nuclear waste.

GSU headquarters conserves energy

BEAUMONT, TX — Officials of Gulf States Utilities Company say their new corporate headquarters building is a "model of energy conservation and efficiency."

A Honeywell computer activates, operates and monitors the heating, cooling, ventilation and lighting systems, with security and life safety systems integrated with it.

Jack Worthy, GSU vice president of general services, explained that "electric resistance heating will be needed only on an average of 5 days a year, and then for only a few hours in the morning to take the chill out of the air." He also said that for most of the time, heat for the building will be produced from lights, office machines and body heat.

The fluorescent lights and hot or cold air can be pre-programmed to turn on in the morning. Lights will be automatically turned off in a timed sequence after working hours, with adequate time allowed for cleaning crews to complete their work.

A variable air volume system uses sensing devices to inform the computer where cooling or heating is needed. Chilled water circulating from the central plant to mechanical rooms on each floor provides the cooling.

KG&E needs more than expected to finance Wolf Creek

WICHITA, KN. — Kansas Gas & Electric Company estimates that it now will need more than $155 million in additional money over the next two years to finance its Wolf Creek nuclear generating plant.

The unanticipated increase comes from two factors, a report from the utility says. First, costs of constructing the 1,150 megawatt plant at Burlington, Kansas, have risen from the $1.7 billion estimate made last year to just under $2 billion currently.

Also adding to the utility's cost of the plant is the fact that because of financing limits placed on Kansas Electric Power Cooperative, this public power utility has reduced its share in the Wolf Creek plant from 17 percent to 6 percent. The financing limits were imposed on KEPCo by the federal Rural Electrification Administration.

Kansas Gas & Electric says the added costs will require the utility to borrow an additional $100 million through a bank-financed loan.

Specifically, the percentage reduction by KEPCo translates into an increase in financial responsibility for the plant by KG&E of $90 to $100 million over the next 2 years, the electric company calculates. This includes $50 million KG&E must repay to KEPCo as a result of the latter making an advanced payment for expected costs.

To meet its permanent financing needs, KG&E believes it will probably have to issue about 7 million shares of common stock in 1982 and 1983.

KG&E is constructing Wolf Creek along with Kansas City Power & Light. The plant was about 70 percent complete at the beginning of 1981.

Pa. utilities hit new peaks

BARRINGTON, IL — A record setting deep-freeze that enveloped most of the country in January was responsible for record peak demand for General Public Utilities and Pennsylvania Power & Light.

Both utilities say that all-time peaks were reached on January 11.

GPU peaked at 11 a.m. with a demand of 6,359 MW exceeding their previous system-wide peak of 6,215 MW set January 12, 1981.

EPRI studies low-volume waste fixation

PALO ALTO, CA — The Electric Power Research Institute has published an evaluation of the state of the art of sludge fixation processes applicable to power plant wastes that might be classified "hazardous" by environmental agencies. The study, conducted by Battelle's Pacific Northwest Laboratories, found eight treatment processes that might be useful and warrant further study.

EPRI project manager Dean Golden reports that large volume solid waste streams produced in power generation are currently exempt from the strict disposal regulations required under the Resource Conservation and Recovery Act for hazardous wastes. These wastes — fly ash, bottom ash, and scrubber sludges — are currently being studied by EPA.

Smaller waste streams from power plants could be classified as hazardous, however, reports Golden. Such streams include ion exchange regeneration wastes, water treatment process sludges, metal cleaning wastes, cooling tower sludges, and miscellaneous equipment cleaning wastes.

If EPA does classify such wastes as hazardous, it may cost utilities less to transform them to non-hazardous forms prior to disposal than to comply with expensive disposal regulations. The potential for liability could also be reduced by "fixing" the wastes.

The EPRI-sponsored investigation identified eight candidate processes for treating low-volume power plant wastes, as shown in the table. The processes include cement, lime, thermoplastic, two types of organic polymer, surface encapsulation, sulfur, and glass. EPRI's Golden reports that only one process, encapsulation, is expected to be applicable for all low-volume waste types. Cost considerations, however, might favor use of less expensive methods, such as cement and pozzolanic processes. The cost range for fixation-solidification is estimated at $2 to $500 a ton.

APPLICABILITY OF SOLIDIFICATION PROCESSES ON LOW VOLUME UTILITY WASTE SLUDGES

	Solidification process							
Waste	Cement-based	Lime-based (pozzolanic)	Thermoplastic	Non-urea formaldehyde organic polymers	Urea formaldehyde organic polymers	Surface encapsulation	Glass	Sulfur-based
Boiler waterside tube cleaning sludge	+	+	+	+	–	+	+	+
Boiler fireside tube cleaning sludge	0	0	0	+	–	+	0	0
Air preheater cleaning sludge	0	0	0	+	–	+	0	0
Wastewater treatment sludge	+	+	+	+	–	+	+	+
Water treatment sludge	+	+	+	+	–	+	+	+
Cooling tower basin sludge	+	+	+	+	+	+	+	+
Cooling tower blowdown residue (evaporation)	0	0	0	+	+	+	0	0
Spent ion exchange resin	0	0	0	+	+	+	0	0

+ = Probably applicable
0 = Potential difficulties
– = Probably not applicable

Source: "Solidification of Low-Volume Power Plant Sludges," EPRI Report CS2171.

Relaxed NOx auto emissions threaten rigid plant controls

CHICAGO — If the U.S. Environmental Protection Agency follows through on its proposed plan to relax the nitrogen oxide tailpipe standard for passenger cars, it could mean that certain owners of NOx stationary sources would be required to install retrofit control equipment in order to attain the ambient air quality standard for that region, an official of the Illinois EPA said at a hearing here.

"The factors that really weigh most heavily in our recommendation (not to relax the NOx standard) are the practical regulatory implications of having large portions of Cook County designated as a nonattainment area for NO_2 after 1982," Daniel J. Goodwin, manager of the Division of Air Pollution Control told a U.S. congressional committee sitting in this midwestern city to hear testimony on revisions to the Clean Air Act.

Goodwin said that if NOx standards are made less stringent under current provisions of the Clean Air Act, it would mean that a permit moratorium for major new or modified sources of NOx emissions would have to be imposed until the ambient standard was attained. Also, retrofitting with reasonably available control technology would have to be mandated on all existing major sources of NOx.

"The most immediate impact of these actions would be blockage—perhaps permanently—of several oil-to-coal boiler conversions being considered for the area, since coal combustion produces considerably more NOx than oil combustion," Goodwin testified before the Subcommittee on Health and the Environment of the House Committee on Energy and Commerce. This subcommittee is a key subcommittee for CAA reauthorization.

Such added controls would not necessarily be confined to the Chicago area, Goodwin told *EL&P*, but could be required on power plant boilers in Denver, certain regions of California, and possibly some other areas of the country.

"Even more distressing," Goodwin said, "is the prospect of having NOx controls—NOx scrubbers, if you will—on large numbers of existing boilers and other fuel combustion sources. Control of NOx from stationary sources is a technology that is in its infancy, and it is not at all clear what technology might be judged "reasonably available" for an existing industrial boiler.

Goodwin said that whatever the decisions on this technology might turn out to be, the effect on Chicago's industrial economy was bound to be adverse. "The mere possibility that NOx control might become necessary could be sufficient to drive industrial siting choices to other locations outside Illinois," he noted. "We think this outcome can and should be avoided."

Auto vs electric industry

It is clear that environmental protection revisions aimed at benefitting the automobile industry could carry negative implications for some segments of the electric utility industry. On April 13, 1981, the U.S. Environmental Protection Agency announced its intention to take 18 special actions changing environmental regulations which, according to the agency, would save the auto industry and consumers several billion dollars over the next 5 years without significantly degrading air quality.

On August 5, 1981, USEPA Administrator Anne Gorsuch announced several "principles" on which the Reagan Administration recommendations for changes to the Clean Air Act would be based. In her press conference that day she said the USEPA would propose permanent relaxations of tailpipe nitrogen oxide and carbon monoxide standards for automobiles. This announcement greatly expanded the scope and effect of the April 13 relief package.

According to Illinois EPA's Goodwin, it is this proposed NOx revision (which would require an amendment to the CAA) that would have the greatest effect on air quality in Chicago. He said that NOx relaxation for both automobiles and trucks would cause ambient NOx concentrations to rise steadily throughout the area, beginning in 1983. This deterioration would result in pollution exceeding the primary National Ambient Air Quality Standard indefinitely into the future, even assuming the control of stationary sources.

But without such relaxations, Goodwin said Chicago air, by 1985, will have improved to the point were no nitrogen dioxide air quality violations existed—a condition that could be maintained from that point on.

'81 utility borrowing, stock sales down

NEW YORK — Total electric company financing decreased slightly in 1981.

A report prepared by EBASCO Business Consulting Company shows electric utility financing fell from $14.4 billion in 1980 to $14.2 billion in 1981. The 1981 figure includes $1.8 billion of pollution control revenue bonds, compared with $1.0 billion in 1980.

Financing by all investor-owned utilities amounted to $21.0 billion in 1981 compared to $22.1 billion last year or a 5 percent decline.

Long-term debt issued by electric companies rose 7 percent to $8.9 billion, compared to $8.3 billion in 1980. Long-term debt issued by all other utilities decreased 20 percent in 1981 from $7.0 billion to $5.6 billion.

Preferred stock financing by electric companies plunged 42 percent from $2.0 billion in 1980 to $1.2 billion. Common stock financing was $4.1 billion in 1981, a slight increase over 1980.

Offerings of preferred stock for all utilities decreased, from $2.4 billion in 1980 to $1.3 billion in 1981.

OFFERINGS OF SECURITIES BY INVESTOR OWNED PUBLIC UTILITY COMPANIES ($000)

	1981		1980	
	Total	Electric	Total	Electric
Long-term debt				
Offered publicly	13,286,895	8,256,895	13,780,400	7,445,400
Offered privately	1,173,000	672,000	1,477,400	862,900
Total long-term debt	14,459,895	8,928,895	15,257,800	8,308,300
Preferred stock				
Offered publicly	1,100,250	980,250	1,709,000	1,618,000
Offered privately	203,500	193,500	680,500	392,500
Total preferred	1,303,750	1,173,750	2,389,500	2,010,500
Common stock				
Offered publicly	5,234,034	4,[illegible]518	4,220,392	3,841,335
Offered through subscription	31,963	31,9[illegible]	234,827	221,968
Total common stock	5,265,997	4,089,481	4,455,219	4,063,303
Total financing	21,029,642	14,192,126	22,082,519	14,382,103

Source: Ebasco Business Consulting Company—1982